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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/388,025	08/31/1999	YUVAL LIROV	11086/3	3297

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EXAMINER

LANIER, BENJAMIN E

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/388,025

Applicant(s)

LIROV ET AL.

Examiner

Benjamin E Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16, 29-43, 45 and 46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-16, 29-43, 45 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Amendment A, filed 22 September 2003, with respect to the rejection(s) of claim(s) 1-16, 29-43, 45, 46 under Torii in view of Gaskins in have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ho, U.S. Patent No. 6,148,342.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 11-16, 29-34, 43, 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Ho, U.S. Patent No. 6,148,342. Referring to claims 29, 31, 32, 34, 45, Ho discloses a secure database management system wherein user database queries are encrypted with user and subject

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identifiers (Abstract, Fig. 2A), which meets the limitation of encrypting a search query including sensitive information. The query is then decrypted and the identifiers are verified in the database records. Upon verification the requesting user is granted access to the requested data (Abstract, Fig. 2A), which meets the limitation of locating a particular record of the records in the record database if the sensitive information of the particular record substantially corresponds to the encrypted sensitive information of the encrypted search query.

Referring to claims 30, 33, Ho discloses that the user's have a define privilege level (Col. 6, lines 38-53), which meets the limitation of storing non-privileged user records and privileged user records.

Referring to claims 11-16, 43, Ho discloses that the identifiers (sensitive) are encrypted with a first key, and the request (non-sensitive) with a second key (Col. 3, lines 14-36).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35-42, 46 are rejected under 35 U.S.C. 103(a), as being unpatentable over Ho, U.S. Patent No. 6,148,342, in view of Schneier. Referring to claims 35-42, 46, Ho discloses a secure database management system wherein user database queries are encrypted with user and subject identifiers (Abstract, Fig. 2A), which meets the limitation of encrypting a search query including sensitive information. The query is then decrypted and the identifiers are verified in the database records. Upon verification the requesting user is granted access to the requested data

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(Abstract, Fig. 2A), which meets the limitation of locating a particular record of the records in the record database if the sensitive information of the particular record substantially corresponds to the encrypted sensitive information of the encrypted search query. Ho does not disclose that the requested data is retrieved via a first and second key. Schneier discloses a communication method wherein the data is encrypted with a private key. The private key is then encrypted with a public key. The encrypted private is then transmitted to the user that is to receive the data. The user decrypts the private key using their public key and is able to decrypt the data with the decrypted private key (page 51). This meets the limitation of obtaining a first key, obtaining a second key from the first, and decrypting the data using the second key. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption method of Schneier in the database management system of Ho because this hybrid system is how public-key cryptography is most often used in a communications system as taught in Schneier (page 51).

#### ***Allowable Subject Matter***

6. Claims 1-10 allowed.

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not disclose a fuzzy signature database including signature vectors that correspond to the encrypted query requests.

#### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 703-305-7684. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

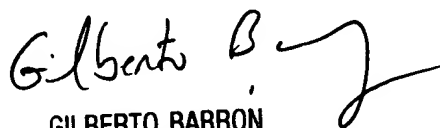
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703)305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-<sup>872-9306</sup>~~746-7239~~.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Benjamin E. Lanier

  
GILBERTO BARRON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100